

PART I GENERAL REQUIREMENTS: NJPDES

A. General Requirements of all NJPDES Permits

1. Requirements Incorporated by Reference

- a. The permittee shall comply with all conditions set forth in this permit and with all the applicable requirements incorporated into this permit by reference. The permittee is required to comply with the regulations, including those cited in paragraphs b. through e. following, which are in effect as of the effective date of the final permit.
- b. General Conditions
 - Penalties for Violations N.J.A.C. 7:14-8.1 et seq.
 - Incorporation by Reference N.J.A.C. 7:14A-2.3
 - Toxic Pollutants N.J.A.C. 7:14A-6.2(a)4i
 - Duty to Comply N.J.A.C. 7:14A-6.2(a)1 & 4
 - Duty to Mitigate N.J.A.C. 7:14A-6.2(a)5 & 11
 - Inspection and Entry N.J.A.C. 7:14A-2.11(e)
 - Enforcement Action N.J.A.C. 7:14A-2.9
 - Duty to Reapply N.J.A.C. 7:14A-4.2(e)3
 - Signatory Requirements for Applications and Reports N.J.A.C. 7:14A-4.9
 - Effect of Permit/Other Laws N.J.A.C. 7:14A-6.2(a)6 & 7 & 2.9(c)
 - Severability N.J.A.C. 7:14A-2.2
 - Administrative Continuation of Permits N.J.A.C. 7:14A-2.8
 - Permit Actions N.J.A.C. 7:14A-2.7(c)
 - Reopener Clause N.J.A.C. 7:14A-6.2(a)10
 - Permit Duration and Renewal N.J.A.C. 7:14A-2.7(a) & (b)
 - Consolidation of Permit Process N.J.A.C. 7:14A-15.5
 - Confidentiality N.J.A.C. 7:14A-18.2 & 2.11(g)
 - Fee Schedule N.J.A.C. 7:14A-3.1
 - Treatment Works Approval N.J.A.C. 7:14A-22 & 23
- c. Operation And Maintenance
 - Need to Halt or Reduce not a Defense N.J.A.C. 7:14A-2.9(b)
 - Proper Operation and Maintenance N.J.A.C. 7:14A-6.12
- d. Monitoring And Records
 - Monitoring N.J.A.C. 7:14A-6.5
 - Recordkeeping N.J.A.C. 7:14A-6.6
 - Signatory Requirements for Monitoring Reports N.J.A.C. 7:14A-6.9
- e. Reporting Requirements
 - Planned Changes N.J.A.C. 7:14A-6.7
 - Reporting of Monitoring Results N.J.A.C. 7:14A-6.8
 - Noncompliance Reporting N.J.A.C. 7:14A-6.10 & 6.8(h)
 - Hotline/Two Hour & Twenty-four Hour Reporting N.J.A.C. 7:14A-6.10(c) & (d)
 - Written Reporting N.J.A.C. 7:14A-6.10(e) & (f) & 6.8(h)
 - Duty to Provide Information N.J.A.C. 7:14A-2.11, 6.2(a)14 & 18.1
 - Schedules of Compliance N.J.A.C. 7:14A-6.4
 - Transfer N.J.A.C. 7:14A-6.2(a)8 & 16.2

PART II

GENERAL REQUIREMENTS: DISCHARGE CATEGORIES

A. Additional Requirements Incorporated By Reference

1. Requirements for Discharges to Surface Waters

- a. In addition to conditions in Part I of this permit, the conditions in this section are applicable to activities at the permitted location and are incorporated by reference. The permittee is required to comply with the regulations which are in effect as of the effective date of the final permit.
 - i. Surface Water Quality Standards N.J.A.C. 7:9B-1
 - ii. Water Quality Management Planning Regulations N.J.A.C. 7:15

B. General Conditions

1. Scope

- a. The issuance of this permit shall not be considered as a waiver of any applicable federal, state, and local rules, regulations and ordinances.

2. Permit Renewal Requirement

- a. Permit conditions remain in effect and enforceable until and unless the permit is modified, renewed or revoked by the Department.
- b. Submit a complete permit renewal application: 180 days before the Expiration Date.

3. Notification of Non-Compliance

- a. The permittee shall notify the Department of all non-compliance when required in accordance with N.J.A.C. 7:14A-6.10 by contacting the DEP HOTLINE at 1-877-WARNDEP (1-877-927-6337).
- b. The permittee shall submit a written report as required by N.J.A.C. 7:14A-6.10 within five days.

4. Notification of Changes

- a. The permittee shall give written notification to the Department of any planned physical or operational alterations or additions to the permitted facility when the alteration is expected to result in a significant change in the permittee's discharge and/or residuals use or disposal practices including the cessation of discharge in accordance with N.J.A.C. 7:14A-6.7.
- b. Prior to any change in ownership, the current permittee shall comply with the requirements of N.J.A.C. 7:14A-16.2, pertaining to the notification of change in ownership.

5. Access to Information

- a. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to enter upon a person's premises, for purposes of inspection, and to access / copy any records that must be kept under the conditions of this permit.

6. Residuals Management

- a. The permittee shall comply with land-based sludge management criteria and shall conform with the requirements for the management of residuals and grit and screenings under N.J.A.C. 7:14A-6.15(a), which includes:
 - i. Standards for the Use or Disposal of Residual, N.J.A.C. 7:14A-20;
 - ii. Section 405 of the Federal Act governing the disposal of sludge from treatment works treating domestic sewage;
 - iii. The Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq., and the Solid Waste Management Rules, N.J.A.C. 7:26;
 - iv. The Sludge Quality Assurance Regulations, N.J.A.C. 7:14C;
 - v. The Statewide Sludge Management Plan promulgated pursuant to the Water Quality Planning Act, N.J.S.A. 58:11A-1 et seq., and the Solid Waste Management Act, N.J.S.A. 13:1E-1 et seq.; and
 - vi. The provisions concerning disposal of sewage sludge and septage in sanitary landfills set forth at N.J.S.A. 13:1E-42 and the Statewide Sludge Management Plan.
 - vii. Residual that is disposed in a municipal solid waste landfill unit shall meet the requirements in 40 CFR Part 258 and/or N.J.A.C. 7:26 concerning the quality of residual disposed in a municipal solid waste landfill unit. (That is, passes the Toxicity Characteristic Leaching Procedure and does not contain "free liquids" as defined at N.J.A.C. 7:14A-1.2.)
- b. If any applicable standard for residual use or disposal is promulgated under section 405(d) of the Federal Act and Sections 4 and 6 of the State Act and that standard is more stringent than any limitation on the pollutant or practice in the permit, the Department may modify or revoke and reissue the permit to conform to the standard for residual use or disposal.
- c. The permittee shall make provisions for storage, or some other approved alternative management strategy, for anticipated downtimes at a primary residual management alternative. The permittee shall not be permitted to store residual beyond the capacity of the structural treatment and storage components of the treatment works. N.J.A.C. 7:14A-20.8(a) and N.J.A.C. 7:26 provide for the temporary storage of residuals for periods not exceeding six months, provided such storage does not cause pollutants to enter surface or ground waters of the State. The storage of residual for more than six months is not authorized under this permit. However, this prohibition does not apply to residual that remains on the land for longer than six months when the person who prepares the residual demonstrates that the land on which the residual remains is not a surface disposal site or landfill. The demonstration shall explain why residual must remain on the land for longer than six months prior to final use or disposal, discuss the approximate time period during which the residual shall be used or disposed and provide documentation of ultimate residual management arrangements. Said demonstration shall be in writing, be kept on file by the person who prepares residual, and submitted to the Department upon request.
- d. The permittee shall comply with the appropriate adopted District Solid Waste or Sludge Management Plan (which by definition in N.J.A.C. 7:14A-1.2 includes Generator Sludge Management Plans), unless otherwise specifically exempted by the Department.

- e. The preparer must notify and provide information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements to the person who applies bulk residual to the land. This shall include, but not be limited to, the applicable recordkeeping requirements and certification statements of 40 CFR 503.17 as referenced at N.J.A.C. 7:14A-20.7(j).
- f. The preparer who provides biosolids to another person who further prepares the biosolids for application to the land must provide this person with notification and information necessary to comply with the N.J.A.C. 7:14A-20 land application requirements.
- g. Any person who prepares bulk residual in New Jersey that is applied to land in a State other than New Jersey shall comply with the requirement at N.J.A.C. 7:14A-20.7(b)1.ix to submit to the Department written proof of compliance with or satisfaction of all applicable statutes, regulations, and guidelines of the state in which land application will occur.

7. Operator Certification

- a. Pursuant to N.J.A.C. 7:10A-1.1 et seq. every wastewater system not exempt pursuant to N.J.A.C. 7:10A-1.1(b) requires a licensed operator. The operator of a system shall meet the Department's requirements pursuant to N.J.A.C. 7:10A-1.1 and any amendments. The name of the proposed operator, where required shall be submitted to the Department at the address below, in order that his/her qualifications may be determined prior to initiating operation of the treatment works.
 - i. Notifications shall be submitted to:
NJDEP
Examination and Licensing Unit
P.O. Box 417
Trenton, New Jersey 08625
(609)777-1012
- b. The permittee shall notify the Department of any changes in licensed operator within two weeks of the change.

8. Operation Restrictions

- a. The operation of a waste treatment or disposal facility shall at no time create: (a) a discharge, except as authorized by the Department in the manner and location specified in Part III of this permit; (b) any discharge to the waters of the state or any standing or ponded condition for water or waste, except as specifically authorized by a valid NJPDES permit.

PART III

LIMITS AND MONITORING REQUIREMENTS

MONITORED LOCATION:

001A Combined Sewer Outfall

RECEIVING STREAM:

STREAM CLASSIFICATION:

DISCHARGE CATEGORY(IES):

CSO - Combined Sewer Systems (GP)

Location Description

32nd & Farragut St

Contributing Waste Types

Sanitary, Storm Water Runoff

Surface Water WCR - Monthly Reporting Requirements:

Submit a Monthly WCR: within twenty-five days after the end of every month beginning from the effective date of the permit (EDP).

Comments:

Outfall 001A is located at 32nd & Farragut Street at latitude: and longitude:

Table III - A - 1: Surface Water WCR - Monthly Limits and Monitoring Requirements

PHASE: Final

PHASE Start Date:

PHASE End Date:

Parameter	Sample Point	Compliance Quantity	Units	Sample Type	Monitoring Period
Solids/Floatables Collected	Combined Sewer Outfall	REPORT	TON/MO	Measured	January thru December
Discharge Duration	Combined Sewer Outfall	REPORT	# OF DAYS	Measured	January thru December
Total Discharge	Combined Sewer Outfall	REPORT	GAL/MO	Measured	January thru December
Events	Combined Sewer Outfall	REPORT	NUMBER	Measured	January thru December
Rainfall	Combined Sewer Outfall	REPORT	INCHES	Measured	January thru December

PART IV

SPECIFIC REQUIREMENTS: NOTES AND DEFINITIONS

Combined Sewer Overflow (CSO) Permit

A. NOTES

1. No notes available for this permit.

B. DEFINITIONS

1. These definitions are specific only to this permit.

- a. "CSO Discharge event" means:
 - In a hydraulically connected system that contains only one CSO outfall, multiple periods of overflow are considered one overflow event if the time between periods of overflow is no more than 24 hours.
 - In a hydraulically connected system that contains more than one CSO outfall, multiple periods of overflow from one or more outfalls are considered one overflow event if the time between periods of overflow is no more than 24 hours without a discharge from any outfall.
- b. "Dry weather overflow (DWO)" means a combined sewer overflow that can not be attributed to a precipitation event within the combined sewer system. DWOs can include flows from one or more of the following: domestic sewage, ground water infiltration, commercial and industrial wastewaters, and any other non-precipitation event related flows (e.g., tidal infiltration under certain circumstances and/or any connections downstream of the regulator to the outfall pipe).
- c. "Contributory collection system" means the entire separate, combined sanitary and storm sewers and treatment works that contribute to the CSO, including CSO outfalls. For purposes of this permit, the permittee is only responsible for the portion they own/operate.
- d. "Green Infrastructure" means installed technology that reduces direct wet weather/stormwater flow into combined or separate sanitary or storm sewers, or surface waters, by allowing the stormwater to be infiltrate, using vegetation and soils. Elements of green infrastructure can include, but are not limited to, low-impact development practices (LID), conservation developments, green/grey interface, rain gardens.
- e. "Hydraulically connected system" means

C. NINE MINIMUM CONTROL REQUIREMENTS

1. Proper operation and regular maintenance programs for the sewer system and the CSOs;
2. Maximum use of the collection system for storage;
3. Review and modification of pretreatment requirements to assure CSO impacts are minimized;
4. Maximization of flow to the POTW for treatment;
5. Prohibition of CSOs during dry weather;
6. Control of solid and floatable materials in CSOs;
7. Pollution prevention;

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts; and
9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.
10. The Nine Minimum Control requirements from the National CSO Policy listed above can be found at http://cfpub.epa.gov/npdes/cso/ninecontrols.cfm?program_id=5

D. NINE ELEMENTS OF THE LONG TERM CONTROL PLAN

1. Characterization, Monitoring, and Modeling of the Combined Sewer Systems;
2. Public Participation;
3. Consideration of Sensitive Areas;
4. Evaluation of Alternatives;
5. Cost/Performance Consideration;
6. Operational Plan;
7. Maximizing Treatment at the Existing POTW Treatment Plant;
8. Implementation Schedule;
9. Post-Construction Compliance Monitoring Program;
10. The Nine elements of a Long Term Control Plan from the National CSO Policy listed above can be found at <http://cfpub.epa.gov/npdes/cso/ltplan.cfm>

SPECIFIC REQUIREMENTS: NARRATIVE REQUIREMENTS

A. MONITORING REQUIREMENTS

1. Standard Monitoring Requirements

- a. All monitoring shall be conducted as specified in Part III.
- b. All monitoring frequencies expressed in Part III are minimum requirements. Any additional samples taken consistent with the monitoring and reporting requirements contained herein shall be reported on the Monitoring Report Forms.
- c. Discharge events shall be directly monitored or predicted using a DEP approved up-to-date model.

B. RECORDKEEPING

1. Standard Recordkeeping Requirements

- a. The permittee shall retain records of all monitoring information, including 1) all calibration and any other methods of monitoring which may be employed and maintenance records and all original strip chart recordings for continuous monitoring instrumentation (if applicable), 2) copies of all reports required by this NJPDES permit, 3) all data used to complete the application for a NJPDES permit, and 4) monitoring information required by the permit related to the permittee's residual use and/or disposal practices, for a period of at least 5 years, or longer as required by N.J.A.C. 7:14A-20, from the date of the sample, measurement, report, application or record.
- b. Records of monitoring information shall include 1) the date, locations, and time of sampling or measurements, 2) the individual(s) who performed the sampling or measurements, 3) the date(s) the analyses were performed, 4) the individual(s) who performed the analyses, 5) the analytical techniques or methods used, and 6) the results of such analyses.

2. CSO Recordkeeping Requirements

- a. The permittee shall retain records to document implementation of the Nine Minimum Controls and LTCP requirements in F and G below, and shall utilize this information when preparing and submitting progress requirements required in Section D, below. This information shall be made available to the Department upon request.

C. REPORTING

1. Standard Reporting Requirements

- a. The permittee shall submit all required monitoring results to the Department on the forms provided to them. The Monitoring Report Forms (MRFs) may be provided to the permittee in either a paper format or in an electronic file format. Unless otherwise noted, all requirements below pertain to both paper and electronic formats.
- b. Any MRFs in paper format shall be submitted to the following addresses:

NJDEP
Mail Code - 401-02B
Division of Water Quality - Office of Permit Management
P.O. Box 420

Trenton, New Jersey 08625-0420

Delaware River Basin Commission (DRBC)
P. O. Box 7360
West Trenton, New Jersey 08628

NJDEP: Northern Bureau of Water Compliance and Enforcement
7 Ridgedale Avenue
Cedar Knolls, New Jersey 07927-1112

Mail Code - 44-03
NJDEP: Central Bureau of Water Compliance and Enforcement
4 Station Plaza - P.O. Box 420
Trenton, New Jersey 08625-0420

NJDEP: Southern Bureau of Water Compliance and Enforcement
One Port Center
2 Riverside Drive, Suite 201
Camden, New Jersey 08103

- c. Electronic data submissions shall be in accordance with the guidelines and provisions outlined in the Department's Electronic Data Interchange (EDI) agreement with the permittee. Paper copies must be available for on-site inspection by DEP personnel or provided to the DEP upon written request.
- d. All monitoring report forms shall be certified by the highest ranking official having day-to-day managerial and operational responsibilities for the discharging facility.
- e. The highest ranking official may delegate responsibility to certify the monitoring report forms in his or her absence. Authorizations for other individuals to sign shall be made in accordance with N.J.A.C. 7:14A-4.9(b).
- f. Monitoring results shall be submitted in accordance with the current Monitoring Report Form Manual and any updates thereof.
- g. If there are no CSO discharge events or Dry Weather Overflows (DWOs) during an entire monitoring period, the permittee must notify the Department when submitting the monitoring results. This is accomplished by placing a check mark in the "No Discharge this monitoring period" box on the paper or electronic version of the monitoring report submittal form.
- h. Dry Weather Overflows must be tallied on the DMR in the Discharge Events row in the Number of Exceedances (No. Ex.) Column.

D. SUBMITTALS

1. Submittal Format Requirements

- a. Since multiple municipalities/permittees own portions of hydraulically connected combined sewer systems, the permittee shall work cooperatively with all other appropriate municipalities/permittees in the hydraulically connected combined sewer system to ensure that the data collected and LTCPs are developed consistently and can be documented to achieve overall water quality benefits. The Department encourages a single LTCP to be developed and submitted on behalf of all of the permittees in a hydraulically connected combined sewer system

- b. Where applicable, the permittee shall cooperate with participating owners/operators of any inter-connected CSO systems regarding continued implementation of the nine minimum controls and LTCP activities. Any plans developed and/or carried out by the operators of these systems shall participate in implementing applicable portions of the approved nine minimum controls and LTCPs for these systems. The comprehensive LTCP (if developed in this manner rather than individual LTCPs) shall delineate the separate and joint responsibilities with its customer municipalities relative to CSOs in the system, operation and maintenance of the CSO structures, and implementation of the nine minimum and LTCPs.
- c. The permittee shall submit the below submittals to Joe.Mannick@dep.state.nj.us and <<permit writer>>.

2. Updated Nine Minimum Controls Submittal Requirements

- a. The permittee shall submit GIS mapped data for all CSO regulators and discharge points owned by the permittee: on or before EDP + 60 days. This data shall be submitted in accordance with NJ GIS protocol at <http://www.state.nj.us/dep/gis/standard.htm>.
- b. The permittee shall submit a street map depicting separately the actual locations of the separate and combined sanitary, storm sewers, the CSO regulators and discharge points owned by the permittee: on or before EDP + 60 days.
- c. In accordance with section F.8. below, the permittee shall submit proof on or before EDP + 6 months that the required signs were installed for each CSO. The information shall include:
 - i. photographs of both sides of sign installation area from the land and water sides;
 - ii. a chart listing the distance from the shoreline; and
 - iii. the physical address location of the sign for each CSO.

3. Long Term Control Plan Submittal Requirements

- a. The permittee shall submit a Baseline Post Construction Compliance Monitoring (CMP) Work Plan, in accordance with Section G9, below, to obtain baseline/existing water quality: on or before EDP + 6 months.
- b. The permittee shall submit the Baseline CMP Report and data, in accordance with G9, below: on or before EDP + 2 years.
- c. The Permittee shall develop a LONG TERM CONTROL PLAN that will include the Elements contained in Section G, below, and shall submit the plan elements in accordance with the schedule contained below. The plan shall consist of three steps:
 - i. Step 1 - System Characterization for the LTCP: the permittee shall submit a system characterization report, in accordance with G1, G2 and G9 below, on or before EDP + 12 months.
 - ii. Step 2 - Development and Evaluation of Alternatives for the LTCP: the permittee shall submit a Development and Evaluations Report, in accordance with G2 through G5, and G9 below, on or before EDP + 24 months.
 - iii. Step 3 - Selection and Implementation of the LTCP: the permittee shall submit a Selection and Implementation of Alternatives Report, in accordance with G2 and G6 through G9 below, on or before EDP + 36 months. For permittees who implement Green Infrastructure and choose presumptive approach, this step is due EDP + 59 months.

4. Progress Report Submittal Requirements

- a. The permittee shall submit an annual progress report: on or before March 1 of each year. This report shall follow the outline structure of the permit requirements in Section F. and G. below and summarize any and all relevant and required information, pursuant to the Nine Minimum Controls & Long Term Control Plan (LTCP), sections F. and G. below, for the previous calendar year. Each annual progress report must include verification that an Operation and Maintenance manual for the treatment works, including related appurtenances and collection system, has been completed.
- b. **Progress Reports shall contain a discussion of the continued implementation of the Nine Minimum Controls and the manner in which all owners/operators of the hydraulically connected contributory collection systems participated in development of the LTCP, including information regarding the development and status of the telephone hotline/website pursuant to Section F.8. below.

E. FACILITY MANAGEMENT

1. Discharge Requirements

- a. The permittee shall discharge at the location(s) specified in PART III of this permit.
- b. The permittee shall not discharge foam or cause foaming of the receiving water that 1) forms objectionable deposits on the receiving water, 2) forms floating masses producing a nuisance, or 3) interferes with a designated use of the waterbody.
- c. The permittee's discharge shall not produce objectionable color or odor in the receiving stream.
- d. The discharge shall not exhibit a visible sheen.

2. Interstate Environmental Commission

- a. The permittee shall comply with the Interstate Environmental Commission's (IEC) "Water Quality Regulations." Although no monitoring requirements specific to the IEC are included in this permit, compliance may be determined by the IEC based on its own sampling events. IEC effluent requirements shall not be considered effluent limitations for the purpose of mandatory penalties under N.J.S.A. 58:10A-10.1.

3. Delaware River Basin Commission (DRBC)

- a. The permittee shall comply with the Delaware River Basin Commission (DRBC) "Water Quality Regulations." Compliance may be determined by the DRBC based on its own sampling events.

4. Applicability of Discharge Limitations and Effective Dates

- a. Surface Water Discharge Monitoring Report (DMR) and Waste Characterization Report (WCR) Form Requirements
 - i. The monitoring conditions contained in PART III apply for the full term of this permit action.

F. Nine Minimum Control Requirements

1. Proper Operation and Regular Maintenance Programs

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- a. The permittee shall continue to implement and update annually, an Operations & Maintenance (O&M) Program and corresponding Manual, including an emergency plan in accordance with N.J.A.C. 7:14A-6.12, to ensure that the treatment works, including but not limited to collection system, the CSO outfalls, solids/floatables facilities, regulators, and related appurtenances which are owned by the permittee are operated and maintained in a manner that achieves compliance with all terms and conditions of this permit.
- b. The permittee shall operate the treatment works using a licensed operator in accordance with N.J.S.A. 58:11-66(a), N.J.A.C. 7:14A-6.12(b) and N.J.A.C. 7:10-1.12.
- c. The permittee shall provide adequate operator staffing for the treatment works.
- d. The permittee shall ensure that staff are properly trained to perform the operation and maintenance duties required and to follow the Standard Operating Procedures (SOPs) in the O&M Program and corresponding Manual.
- e. The permittee shall implement an O&M Program & Manual that includes, at a minimum:
 - i. A directory of appropriate O&M staff, including their individual responsibilities and contact information;
 - ii. An accurate characterization of the contributory collection system. This characterization shall contain a chart, organized by CSO outfall, as appropriate, of the capacity, dimensions, age, type of material, and location of:
 - CSO outfalls,
 - tide gates,
 - solids/floatables controls,
 - regulators,
 - pump stations,
 - Significant Indirect Users (SIUs),
 - areas that historically experience the following: blockages, bottlenecks, flow constrictions, sewer back-up, overflows or related incidences.
- f. The permittee shall delineate the characterization information required in e), above, on a GIS map, as applicable, pursuant to N.J.A.C. 7:1D-Appendix A and shall follow the NJ GIS protocol at <http://www.state.nj.us/dep/gis/standard.htm>.
- g. The permittee shall map the contributory collection system areas, clearly indicating the CSO outfalls and their upstream, associated regulators, on the GIS maps required in f., above.
- h. The permittee shall also include Standard Operating Procedures (SOPs) in the O&M Program and Manual for the operation, scheduled preventative maintenance, and monthly inspections to ensure that the contributory collection system and CSOs will function properly. At a minimum the SOPs shall contain detailed instructions for system operations, such as frequency of inspections, regular maintenance, and the timely repair of the contributory collection system.
 - i. Ensure that the contributory collection system functions in such a way as to not result in backed-up sewage.... in streets, residences, parking lots, parks, or bottlenecks/constrictions that limit flow in specific areas and prevent downstream POTW treatment capacity from being fully utilized, as per F.4. below;
 - ii. Ensure that the storage and conveyance of combined sewage to the POTW is maximized in accordance with F.2. and 4. below in cooperation with the receiving POTW in support of their CSO related NJPDES permit conditions;

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- iii. Ensure that the discharges from SIUs contributory to the CSOs are minimized to the greatest extent practicable as per F.3. below;
 - iv. Ensure there will be no dry weather overflows from any CSO as per F.5. below;
 - v. Ensure the solids/floatables appurtenances will be maintained and the solids/floatables will be removed from the CSO discharge and disposed of properly at such frequency so as not to cause obstructions of flow for any future CSO discharges, in accordance with Part II of this permit and F.6. below;
 - vi. Prevent the intrusion of receiving waters due to high tides and/or receiving water flooding into the contributory collection system in accordance with N.J.A.C. 7:14A-23.14(d)5;
 - vii. Ensure the removal within 1 week of the permittee becoming aware of debris and/or additional obstructions due to fats, oils and greases, and sediment buildup, or other foreign materials;
 - viii. Shall begin immediate action(s) to ensure the repair of damaged and/or structural deterioration of the contributory collection system;
 - ix. That provides for ongoing I/I reduction strategies through the identification of I/I sources and the prioritization and implementation of I/I reduction projects.
 - i. The permittee shall incorporate an Asset Management Plan as part of the overall O&M strategy. This plan shall include infrastructure inventory with critical infrastructure repair/replacement needs identified, that ensures the contributory collection system is perpetually and proactively managed with the appropriate resources (capital, staffing, training, supplies, equipment) allocated in the permittee's budget as prepared and submitted to Department of Community Affairs.
 - j. The permittee shall also include in the O&M Program and Manual, the Emergency Plan, in accordance with N.J.A.C. 7:14A-6.12(d). The Emergency Plan shall provide for, to the maximum extent possible, uninterrupted treatment works operation during emergency conditions. The Emergency Plan shall include Standard Operating Procedures (SOPs) which ensure the effective operation of the treatment works under emergency conditions, such as extreme weather events (including 100 and 500 year storm events) and extended periods of no power.
 - k. The permittee shall amend the O&M Program & Manual no less frequent than annually to reflect updated information and changes in the characterization, design, construction, operations, maintenance, emergency plan, SOPs as listed in items F.1. above and include verification that the O&M Manual has been prepared and updated in accordance with the requirements in Section D. above
- 2. Maximum use of the collection system for storage**
- a. The permittee shall use the contributory collection system for in-line storage of sewage for future conveyance to the POTW when sewer system flows subside by ensuring that the combined sewage is retained in the sewer system for as long as possible to minimize CSO discharges (volume, frequency and duration), while not creating or increasing backed-up sewage flooding of homes, streets and surrounding areas.
 - b. The permittee shall minimize the introduction of sediment and obstructions in the contributory collection system pursuant to F.1. and F.7, above.
 - c. The permittee shall maintain the contributory collection system pursuant to F1.

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- d. The permittee shall identify and implement minor modifications, based on the ongoing evaluations from the characterization required under the O&M section F.1 above, to enable the contributory collection system to store additional wet weather flows to reduce any backed-up sewage flooding until downstream sewers and treatment facilities can adequately convey and treat them.

3. Review and modification of pretreatment requirements to assure CSO impacts are minimized (note: b and c will apply to DLA permits...non-DLA permits will be enforced through the DEP)

- a. The permittee shall: determine the locations, associated CSO outfalls and discharge nature of the Significant Indirect Users (SIUs) in the contributory collection system; determine and prioritize the environmental impact of these SIUs by CSO outfall; and include this information in the characterization portion of the O&M Manual as required in F.1. above.
- b. The permittee shall establish agreements with SIUs or ordinances specifying that, when and where possible, the SIU (especially for batch dischargers, non-continuous dischargers) should restrict its discharge to the greatest extent practicable during wet weather periods.
- c. The permittee shall require that the SIUs investigate ways to minimize their dischargers during wet weather and report their finding to the permittee.

4. Maximization of flow to the POTW for treatment

- a. The permittee shall operate and maintain the contributory collection system (and treatment plant) to maximize the conveyance of wastewater to (at) the POTW for treatment to minimize the impacts of CSO discharges on the receiving waters as per F.1. above.
- b. The permittee shall evaluate and implement, in cooperation with the receiving sewage treatment plant, low cost alternatives for increasing flow to the POTW. (this applies to non-stp permits)
 - i. Capacity evaluations of the combined sewer system and pumping stations from F.1.d.i. above to determine the maximum amount of flow that can be stored and transported;
 - ii. Identification of other activities conducted and/or planned to further maximize flow to the POTW.

5. Prohibition of CSOs during dry weather

- a. Dry weather overflows (DWOs) are prohibited.
- b. All DWOs must be reported to the Department as incidents of non-compliance in accordance with the requirements at N.J.A.C. 7:14A-6.10, along with a description of the corrective actions taken.
- c. The permittee shall inspect the combined sewer system as required under section F.1 above, to ensure there are no DWOs. This inspection program shall include, but is not limited to, a visual inspection program of sufficient scope and frequency to provide reasonable assurance that any DWOs will be detected.
- d. The permittee shall prohibit any connections, including but not limited to construction dewatering, remediation activities or similar activities, downstream of a CSO regulator, that will convey flow to the CSO during dry weather. On a case-by-case basis, the Department reserves the right to allow temporary use of the CSO outfall structures for other types of discharges to address extraordinary circumstances. Any use under this provision must be specifically approved by the Department.

6. Control of solids/floatables in CSOs

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- a. The permittee shall continue to implement measures to operate and maintain the solids/floatable controls in place at the CSO.
- b. The discharge of solids/floatables which cannot pass through a screen having openings of 0.5 inches (13.0 mm) is prohibited. During every CSO discharge event, the permittee shall capture for removal any solids/floatables in the combined sewer overflow that would be captured by a 0.5 inch screen prior to discharge into the receiving water.
- c. The solids/floatables shall be removed from each CSO outfall screen structure when necessary to ensure that there will be no flow restrictions during the next CSO discharge event.
- d. All solids/floatables removed from the CSO (which are not conveyed to the DTW through the combined sewer collection and conveyance system) must be disposed of properly at a permitted solid waste facility authorized to accept grit and screening materials from wastewater treatment facilities in accordance with N.J.A.C. 7:14A and Part II of this permit.

7. Pollution prevention

- a. The permittee shall implement and upgrade pollution prevention measures necessary to prevent/limit contaminants from entering the contributory collection system. Unless demonstrated to the Department to be impracticable measures shall include, but are not limited to, the following:
 - i. street cleaning,
 - ii. retrofitting of stormwater inlets,
 - iii. commercial/industrial pollution prevention rules, ordinances etc. as per F.3. above,
 - iv. solid waste collection, and recycling,
 - v. public education programs,
 - vi. enforcement of illegal dumping regulations,
 - vii. applicable sewer use agreements shall be reviewed and modified if necessary to address the reduction of inflow and infiltration into the collection system where feasible.

8. Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.

- a. The permittee shall post CSO Identification Signs at every CSO outfall location identified in Part III of this permit which shall conform to the following specifications, unless an alternative design has been approved by the Department:
 - i. Signs must be installed in such a manner as to have the same information visible from both the land and from the water;
 - ii. Signs must be at least 18" x 24" and printed with reflective material;
 - iii. Signs shall be in compliance with applicable local ordinances;
 - iv. The signs shall depict the following information:

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- Warning, possible sewage overflows during and following wet weather. Contact with water may also cause illness,
- Report dry weather discharge to NJDEP Hotline at 1 (877) 927-6337 (WARN-DEP),
- Report foul odors or unusual discoloration to NJDEP Hotline or (name of permittee spelled out) MUA at (phone no.),
- NJPDES Permit No. (use the current authorization number),
- Discharge Serial No. _____,
- www.state.nj.us/dep/dwq/cso.htm,
- International Standards Organization symbols prohibiting swimming, fishing, kayaking;

b. The permittee shall submit to DEP the required proof the signs were installed in accordance with Section D. above;

c. The permittee shall continue to employ measures to provide reasonable assurance that the affected public is informed of CSO discharges in a timely manner. These measures shall include, but are not limited to:

- i. Posting leaflets/flyers with general information at affected use areas such as beaches, marinas, docks, fishing piers, boat ramps, parks and other public places (within 100 feet of outfall) to inform the public what CSOs are, the locations of the CSO outfall and the frequency and nature of the discharges and precautions that should be undertaken for public health/safety and web sites where additional CSO/CSS information can be found;
- ii. Notification to all Residents, either US Postal service or email, (with copies sent to the NJDEP at the address listed in D. above) in the permittee's municipality and any other municipality with sewer service from the permittee that contribute to your CSO providing additional information as to what efforts the permittee has made and plans to continue to undertake to reduce/elimination the CSOs and related threat to public health. Updated notifications shall be mailed on an annual basis; and
- iii. On or before EDP + 12 months, the permittee shall create and maintain a telephone hot line or website for interested citizen inquiries to provide immediate/up-to-date information regarding where CSO discharges are occurring, or that no discharges are occurring.

9. Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls

- a. The permittee shall monitor the CSO discharge events and record the date, time and duration of each discharge event from each CSO through appropriate modeling or by an appropriately placed flow meter/totaling device, level sensor, or other appropriate measuring device, and report the required information on the DMR as required by Part III of this permit

G. Long Term Control Plan Requirements:

1. Characterization Monitoring and Modeling of the Combined Sewer System

- a. The permittee shall submit an updated characterization study that will result in a comprehensive characterization of the CSS developed through records review, monitoring, modeling and other means as appropriate to establish the existing baseline conditions, evaluate the efficacy of the CSO technology based controls, and determine the baseline conditions upon which the LTCP will be based. The characterization shall include a thorough review of the contributory collection system, including areas of backed-up sewage including to basements, streets and other public and private areas, to adequately address the response of the CSS to various precipitation events; identify the number, location, frequency and characteristics of CSO; and identify water quality impacts that result from CSOs.

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The permittee can use previous studies to the extent that they are accurate and representative of the current required information, such as <<fill in name of applicable studies>>.

b. The major elements of the sewer system characterization are:

- i. Rainfall Records--The permittee shall examine the rainfall record as per F.9. above for the geographic area of its existing CSS using sound statistical procedures and best available data. The permittee must evaluate flow variations in the receiving water body to correlate between CSOs and receiving water conditions.
- ii. Combined Sewer System Characterization—the permittee shall evaluate sewer system records, field inspections gathered from the O&M Characterization required under F.1. above (and other previous relevant studies), and other activities necessary to understand the number, location and frequency of overflows and their location relative to sensitive areas and to pollution sources in the collection system, such as significant indirect users.
- iii. CSO Monitoring - Using the information gathered from F.9. above, the permittee shall develop and/or update a previously existing, comprehensive, representative monitoring program that measures the frequency, duration, flow rate, volume and pollutant concentration of CSO discharges and assesses the impact of the CSOs on the receiving waters. The monitoring data summary may utilize existing data from previous studies, and must include necessary CSO effluent and ambient in-stream monitoring for pathogens (current and recreational standards for bacteriological indicators (e.g., fecal coliform, Enterococcus and E. Coli)). A representative sample of overflow points can be selected that is sufficient to allow characterization of CSO discharges, their water quality impacts and to facilitate evaluation of control plan alternatives.
- iv. Modeling – the permittee may employ models, which include appropriate calibration and verification with field measurements, to aid in the characterization. If models are used they shall be identified by the permittee along with an explanation of why the model was selected and used in the characterization. The permittee should base its choice of a model on the characteristics of its contributory sewer system, the number and location of overflow points, and the sensitivity of the receiving water body to the CSO discharges. The sophistication of the model should relate to the complexity of the system to be modeled and to the information needs associated with evaluation of CSO control options and water quality impacts. Because of the iterative nature of modeling sewer systems, CSOs, and their impacts, monitoring and modeling efforts are complementary and should be coordinated with other affected entities.
- v. The permittee shall identify sensitive areas to which its CSOs occur. These areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters with primary contact recreation, bathing beaches, public drinking water intakes or their designated protection areas, and shellfish beds.

2. Public Participation Process

- a. The permittee shall institute a Public Participation Process in accordance with the Public Participation Workplan previously submitted on (date) entitled: (title). Implementation shall actively involve the affected public throughout each of the 3 Steps of the LTCP process. The affected public includes rate payers, industrial users of the sewer system, persons who reside downstream from the CSOs, persons who use and enjoy the downstream waters, and any other interested persons.
- b. The permittee shall invite members of the affected/interested public to establish a supplemental CSO Team to the permittee's team from F.1. above.

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3. Consideration of Sensitive Areas

- a. The permittee's LTCP shall give the highest priority to controlling overflows to sensitive areas. Sensitive areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters with primary contact recreation, bathing beaches, public drinking water intakes or their designated protection areas, and shellfish beds.
- b. The long-term CSO control plan shall comply with the following requirements.
 - i. Prohibit new or significantly increased overflows;
 - ii. Eliminate or relocate overflows that discharge to sensitive areas wherever physically possible and economically achievable, except where elimination or relocation would provide less environmental protection than additional treatment;
 - iii. Where elimination or relocation is not physically possible and economically achievable, or would provide less environmental protection than additional treatment, provide the level of treatment for remaining overflows deemed necessary to meet WQS for full protection of existing and designated uses.
 - iv. The permittee shall submit a new evaluation for each permit cycle

4. Evaluation of Alternatives

- a. The permittee shall evaluate a range of CSO control alternatives that will provide for attainment of water quality standards using either the Presumption Approach or the Demonstration Approach (as defined in section b. and c. below).
- b. The permittee shall submit, as per Section (submittal section insert) above, the Evaluation of Alternatives Report that will enable the permittee, in consultation with the Department, the public, owners and/or operators of the contributory collection system, to select the alternatives to ensure the CSO controls will meet CWA requirements, ensure CSO discharges do not cause exceedances of any water quality criteria, will be protective of the existing and designated uses at N.J.A.C. 7:9B, and give the highest priority to controlling CSOs to sensitive areas.
- c. The permittee shall select either demonstrative or presumptive approach for each group of hydraulically connected CSOs, and identify each CSO group and its individual discharge locations.
- d. The Evaluation of Alternatives Report shall include a list of control alternative(s) evaluated for each CSO.
- e. The permittee shall evaluate a range of CSO control alternatives predicted to accomplish the requirements of the CWA. In its evaluation of each potential CSO control alternative, the permittee shall use an NJDEP approved hydrologic and hydraulic model. The permittee shall utilize the model to simulate the existing conditions and conditions as they are expected to exist after construction and operation of the chosen alternative. The permittee shall evaluate the practical and technical feasibility of the proposed CSO control alternative, and water quality benefits of constructing and implementing

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various remedial controls and combination of such controls and activities which shall include, but not be limited to:

- green infrastructure (which allows for greater removal of load/flow),
- increased storage capacity in the collection system,
- POTW expansion and/or storage at the plant (based on information provided by the POTW as per D.4. above, an evaluation of the capacity of the unit processes must be conducted at the POTW resulting in a determination of whether there is any additional wet weather treatment capacity available at the POTW). Based upon this information, the permittee must determine the amount of CSO discharge reduction that would be achieved by utilizing this additional treatment capacity while maintaining compliance with all permit limits,
- Inflow and Infiltration reduction in the contributory collection system to free up storage capacity or conveyance in the sewer system and/or treatment capacity at the POTW,
- sewer separation, and
- CSO discharge treatment

f. The "Presumption" Approach, as contained in N.J.A.C 7:14A-11 Appendix C states:

A program that meets any of the criteria listed below will be presumed to provide an adequate level of control to meet the water quality-based requirements of the CWA, provided the Department determines that such presumption is reasonable in light of the data and analysis conducted in the characterization, monitoring, and modeling of the system and the consideration of sensitive areas described above.

- i. No more than an average of four overflow events (see definition) per year, provided that the Department may allow up to two additional overflow events per year. For the purpose of this criterion, an overflow event is one or more overflows from a CSS as the result of a precipitation event that does not receive the minimum treatment specified below
- ii. The elimination or the capture for treatment of no less than 85% by volume of the combined sewage collected in the CSS during precipitation events on a system-wide annual average basis; or
- iii. The elimination or removal of no less than the mass of the pollutants, identified as causing water quality impairment through the sewer system characterization, monitoring, and modeling effort, for the volumes that would be eliminated or captured for treatment under paragraph ii. above. Combined sewer flows remaining after implementation of the nine minimum controls and within the criteria specified at i. or ii. above, should receive a minimum of:
 - Primary clarification (Removal of floatables and settleable solids may be achieved by any combination of treatment technologies or methods that are shown to be equivalent to primary clarification.);
 - Solids and floatables disposal; and
 - Disinfection of effluent, if necessary, to meet WQS, protect designated uses and protect human health, including removal of harmful disinfection chemical residuals, where necessary.

g. The "Demonstration" Approach, as contained in NJAC 7:14A-11 Appendix C

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A permittee may demonstrate that a selected control program, though not meeting the criteria specified under the Presumption Approach above, is adequate to meet the water quality-based requirements of the CWA.

The permittee must demonstrate each of the following:

- i. The planned control program is adequate to meet WQS and protect designated uses, unless WQS or uses cannot be met as a result of natural background conditions or pollution sources other than CSOs,
- iv. The CSO discharges remaining after implementation of the planned control program will not preclude the attainment of WQS or the receiving waters' designated uses or contribute to their impairment.
- iii. The planned control program will provide the maximum pollution reduction benefits reasonably attainable, and
- iv. The planned control program is designed to allow cost effective expansion or cost effective retrofitting if additional controls are subsequently determined to be necessary to meet WQS or designated uses.

5. Cost Performance Considerations

- a. The permittee shall submit under Section D.1.h above, the cost/performance considerations that demonstrate the relationships among proposed control alternatives that correspond to those required in G.4. above. This shall include an analysis to determine where the increment of pollution reduction achieved in the receiving water diminishes compared to the increased costs. This analysis, often known as "knee of the curve", shall be among the considerations used to help guide selection of controls.

As per G. a., above, the permittee can use previous studies to the extent that they are accurate and representative of the current required information, such as <<fill in name of applicable studies>>.

6. Operational Plan

- a. Upon Department approval of the final LTCP and throughout implementation of the approved LTCP as appropriate, the permittee shall modify the O&M Program and Manual to address the final LTCP CSO control facilities and operating strategies, including but not limited to, maintaining Green Infrastructure, staffing and budgeting, inflow/infiltration, and emergency plans.

7. Maximizing Treatment at the Existing POTW

- a. *(Use for POTW permittees)* The LTCP shall include the maximization of the removal of pollutants during and after each precipitation event at the POTW, ensuring that such flows receive treatment to the greatest extent practicable utilizing existing tankage for storage, while still meeting all permit limits.
- OR-
- a. *(Use for 'CSO only' permittees)* The permittee shall incorporate the receiving POTW's plan for maximizing flow and treatment at the POTW.

8. Implementation Schedule

- a. The permittee shall submit a construction and financing schedule for implementation of CSO controls. Such schedules may be phased based on the relative importance of the adverse impacts upon water quality standards, the permittee's financial capability, and other water quality related infrastructure improvements.
- b. As per D.1.i. the permittee shall submit an implementation schedule, including yearly milestones, which considers:

- i. Adequately addressing areas of backed-up sewage including to basements, streets and other public and private areas;
- ii. Overflows that discharge to sensitive areas as the highest priority;
- iii. Use impairment of the receiving water;
- iv. The permittee's financial capability including consideration of such factors as:
 - Median household income;
 - Total annual wastewater and CSO control costs per household as a percent of median household income;
 - Overall net debt as a percent of full market property value;
 - Property tax revenues as a percent of full market property value;
 - Property tax collection rate;
 - Unemployment; and
 - Bond rating.
- v. Grant and loan availability;
- vi. Previous and current residential, commercial and industrial sewer user fees and rate structures; and
- vii. Other viable funding mechanisms and sources of financing;
- viii. Resources necessary to design, construct and/or implement other water related infrastructure improvements as part of an overall asset management plan.

9. Compliance Monitoring Program

The monitoring information collected from this phase of the CMP as outlined in Section G.9. will be compared to subsequent CMP events during and after LTCP implementation to evaluate effectiveness of implemented CSO controls

- a. The permittee shall implement a Compliance Monitoring (CMP) Program, adequate to verify baseline and existing conditions, the effective of CSO controls, compliance with water quality standards, and protection of designated uses. This compliance monitoring program shall be conducted before, during and after implementation of the LTCP and shall include a work plan to be approved by the Department that details the monitoring protocols to be followed, including the following necessary monitoring:

The permittee can use previous studies to the extent that they are accurate and representative of the current required information, such as <<fill in name of applicable studies, including characterization studies as required above>>.

- i. discharge frequency for each CSO (days/hours per month),
- ii. duration of each discharge (event) for each CSO (start and stop times for each calendar day),
- iii. quality for each CSO, which shall include pathogen monitoring at a minimum,

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- a) rainfall monitoring in the vicinity of each CSO/municipality.
- b. For the Demonstration Approach, the above monitoring must be ongoing every year upon LTCP approval to document trends in water quality due to CSO discharges. The results of which must be submitted in the annual report required in Section D. above.
- c. For the Presumption Approach, the above monitoring may be reduced during construction/implementation of the CSO controls.

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